

Patent Abstracts of Japan

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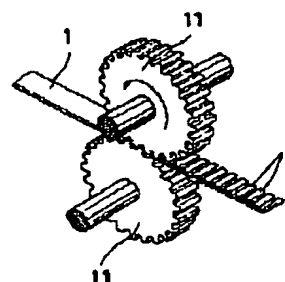
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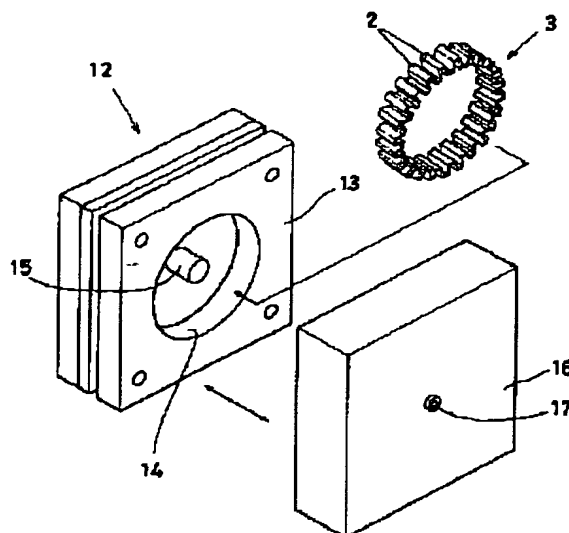
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TITLE : MANUFACTURE OF GEAR

(A)



(B)



ABSTRACT : PURPOSE: To manufacture a gear, light in weight and of superior strength of gear sections by bending and setting a band material which has been formed as teeth section by press molding into a molding tool, injecting synthetic resin or alloy for die casting onto either one of the inner or outer peripheries of the band material and solidifying it.

CONSTITUTION: A spur gear section 2 is formed by passing a band-shaped steel plate 1 through a couple of gear type molding rollers 11 meshing with each other. Then the steel plate 1 on which the gear section 2 is formed is cut into a given length, bent into a circular shape and bonded at both ends to form a gear ring 3. The gear ring 3 is fitted into a mold hole 14 formed on a core 13 of a movable mold 12 and having a boss 15 for forming an axial hole of gear at its center, and the movable mold 12 is pressed to a fixed mold 16 and fixed thereon, and molten synthetic resin is injected from an injection inlet 17 to the inner peripheral side of the gear ring 3 through a resin introduction section. When mold releasing is carried out by returning the movable mold 12 when synthetic resin is solidified, a molded product integrated with the resin introduction section corresponding to the resin introduction section is manufactured.

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